10/5/07



Journal of Controlled Release
Volume 80, Issues 1-3, 23 April 2002, Pages 69-77

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doi:10.1016/S0168-3659(01)00557-0 Cite or Link Using DOI


# Temperature-responsive and degradable hyaluronic acid/Pluronic composite hydrogels for controlled release of human growth hormone

**Mee Ryang Kim and Tae Gwan Park**
Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Taejon 305-701, South Korea
Received 24 June 2001; accepted 14 December 2001; Available online 3 February 2002.

## Abstract

Temperature-sensitive hyaluronic acid (HA) hydrogels were synthesized by photopolymerization of vinyl group modified HA in combination with acrylate group end-capped poly(ethylene glycol)–poly(propylene glycol)–poly (ethylene glycol) tri-block copolymer (Pluronic F127). The synthesized HA/Pluronic composite hydrogels gradually collapsed with increasing temperature over the range of 5–40 °C, suggesting that the Pluronic component formed self-associating micelles in the hydrogel structure. Upon prolonged incubation in a buffer medium, the micelles slowly degraded due to the hydrolytic scission of the ester linkage between the Pluronic and acrylate group. The mass erosion occurred much faster at 37 °C than at 13 °C, indicating that at the higher temperature, the ester linkage between the Pluronic and acrylate group might be more exposed to an aqueous environment and thus be more readily hydrolyzed due to Pluronic micellization. Incorporation of recombinant human growth hormone in the hydrogel resulted in a sustained release profile which followed a mass erosion pattern.

**Author Keywords:** Hyaluronic acid; Pluronic; Degradation; Temperature-sensitive

## Article Outline

1. Introduction
2. Experimental
    2.1. Materials

10/511707

Technical Bulletin

# Pluronic® F127 Block Copolymer Surfactant

Pluronic F127 is a difunctional block copolymer surfactant terminating in primary hydroxyl groups. A nonionic surfactant that is 100% active and relatively nontoxic.

**Shelf Life:**
BASF will endorse the results on the certificate of analysis for a period of up to two years from the date of manufacture for material in original, unopened, properly stored containers. Beyond two years, we recommend the quality of the material be confirmed prior to use, by retesting the certificate of analysis parameters.

**Standard packaging:**
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Prill – 57-gallon, non-returnable fiber drum. (200 pounds net, 215 pounds gross)

Micropastille – 57-gallon, non-returnable fiber drum. (250 pounds net, 265 pounds gross)

Please refer to the Material Safety Data Sheet (MSDS) for this product for instructions on safe and proper handling and disposal.

| Specifications | |
|---|---|
| Cloud point (10% aqueous)..... | >100°C |
| Color, APHA ..... | 120 max. |
| Water, weight %..... | Cast Solid–0.4 max.<br>Prill/Micropastille–0.75 max. |
| pH (2.5% aqueous)..... | 6.0 – 7.0 |

| Typical physical properties | |
|---|---|
| Form..... | Cast solid /Prill / Micropastille |
| Average molecular weight..... | 12600 |
| Specific gravity, 77°/25°C..... | 1.05 |
| Viscosity, cps at 77°C ..... | 3100 |
| Melt Point..... | 56°C |
| Cloud point (1% aqueous)..... | >100°C |
| Foam height (Ross Miles, 0.1% aqueous at 50°C)..... | 40 mm |
| Surface tension (0.1% aqueous)..... | 41 dynes/cm at 25°C |
| HLB..... | 18 – 23 |
| Solubility in water at 25°C..... | >10% |
| Wetting, Draves Sink Time (3-gm hook, 0.1% aqueous at 25°C)..... | >360 seconds |



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     FILE 'HCAPLUS' ENTERED AT 10:04:08 ON 09 MAY 2007
L1         27348 S HYALURON?
L2         58105 S BLOCK(W)COPOLYMER
L3        135083 S (POLYETHYLENE OR POLYPROPYLENE)(W)(OXIDE OR GLYCOL)
L4          8203 S POLYLACTIC OR POLYGLYCOLIC
L5           104 S L1 AND L2
L6            64 S L1 AND L2 AND (L3 OR L4)

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L7             0 S L6 AND (AY<2003 OR PY<2003 OR PRY<2003)

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FILE LAST UPDATED: 1 May 2007  (20070501/ED)

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=> s hyaluron?

L1        27348 HYALURON?

=> s block(w)copolymer

         247421 BLOCK
         625958 COPOLYMER
L2        58105 BLOCK(W)COPOLYMER

=> s (polyethylene or polypropylene)(w)(oxide or glycol)

         362413 POLYETHYLENE
         172214 POLYPROPYLENE
        1754663 OXIDE
         369920 GLYCOL
L3       135083 (POLYETHYLENE OR POLYPROPYLENE)(W)(OXIDE OR GLYCOL)

=> s polylactic or polyglycolic

           7265 POLYLACTIC
           2024 POLYGLYCOLIC
L4         8203 POLYLACTIC OR POLYGLYCOLIC

=> s L1 and L2

L5          104 L1 AND L2

=> s L1 and L2 and (L3 or L4)

L6           64 L1 AND L2 AND (L3 OR L4)

=> file stnguide

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FULL ESTIMATED COST                                    2.60       3.23

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             0 POLYETHYLENE
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             0 OXIDE
             0 GLYCOL
             0 (POLYETHYLENE OR POLYPROPYLENE)(W)(OXIDE OR GLYCOL)
             0 POLYLACTIC
             0 POLYGLYCOLIC
             0 AY<2003
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FILE LAST UPDATED: 1 May 2007  (20070501/ED)

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      22885287 PY<2003
       3919110 PRY<2003
L8           34 L6 AND (AY<2003 OR PY<2003 OR PRY<2003)
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=> file stnguide

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LAST RELOADED: May 4, 2007 (20070504/UP).

=> d l8 1-34 ti
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L8 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Medical devices having nanoporous layers and methods for making the same

L8 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Medical devices having nanoporous layers and methods for making the same

L8 ANSWER 3 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Biodegradable epoxy crosslinking agents and their preparation and their application to preparation of biodegradable materials

L8 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Integrin peptide-polymer bioconjugates that block cell interactions and have anti-inflammatory and immunosuppressant activities

L8 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Nucleus augmentation with in situ formed polymer hydrogels

L8 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Composites containing biodegradable polymers and inorganic materials used as tissue engineering scaffold

L8 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Electrospun amorphous pharmaceutical compositions

L8 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions and methods for reducing scar tissue formation

L8 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hair compositions containing ether-type cationic surfactants and thickening polymers

L8 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Oral pharmaceutical delivery systems

L8 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hyaluronic acid modification product

L8 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Biological affinity-based drug delivery systems

L8 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents

L8 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions containing collagen gels and a metalloprotease inhibitor

L8 ANSWER 15 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Valved prosthesis with porous substrate filled with polymeric hydrogel or structural protein

L8 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Degradable porous materials with high surface areas and their preparation

L8 ANSWER 17 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Delivery of nitric oxide for pulmonary hypertension treatment

L8 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Bioactive surface modifiers for polymers for medical goods

L8 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions comprising protein- or polysaccharide-containing anti-microtubule agents for treatment of inflammatory conditions

L8 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Clear oil-containing pharmaceutical compositions containing a therapeutic agent

L8 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hemostatic compositions of polyacids and polyalkylene oxides

L8 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polyacid/polyalkylene oxide foams and gels for drug delivery

L8 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Liquid composition of a biodegradable block copolymer for drug delivery system

L8 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Electropolymerizable monomers and polymeric coatings on implantable devices

L8 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Interpenetrating polymer networks as high strength medical sealants

L8 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Analgesic and antinociceptive compositions containing polymers

L8 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polyrotaxane supramolecular materials for implants

L8 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hydrogels containing radiopaque agent and drugs for the treatment of aneurysms

L8 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Bioresorbable compositions for implantable prostheses

L8 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polyoxyalkylene compositions and method for inhibiting post-surgical adhesions

L8 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Biodegradable gel compositions containing crosslinked hyaluronic acid, and sustained-release preparations containing the compositions

L8 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hydrophilic coating compositions for producing thin film on hydrophobic

substrates

L8 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Drug release systems containing water-soluble polymer domain and biodegradable hydrogel as matrix

L8 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Photopolymerizable biodegradable hydrogels as tissue contacting materials and controlled-release carriers

=> d l8 3 6 7 8 10 11 13 14 15 16 18 19 21 22 23 25 26 30 31 33 ti abs bib
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L8 ANSWER 3 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Biodegradable epoxy crosslinking agents and their preparation and their application to preparation of biodegradable materials
AB The crosslinking agent is prepared by reacting polyethylene glycol or glycerol with a polyester (e.g., lactide) in the presence of catalyst (e.g., stannous octanoate) at 120-140° for >3 h to form a polyethylene glycol-polyester; and mixing the polyethylene glycol-polyester with epichlorohydrin, benzyltriethylammonium chloride and NaOH solution, and reacting at 50-70°. The epoxy crosslinking agent may be used to prepare biodegradable material from hyaluronic acid, Na alginate, collagen, chitosan, or cellulose by crosslinking at 25-55°.
AN 2005:648748 HCAPLUS <<LOGINID::20070509>>
DN 143:134200
TI Biodegradable epoxy crosslinking agents and their preparation and their application to preparation of biodegradable materials
IN Zhou, Changren; Li, Lihua
PA Jinan University, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 10 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | CN 1417253 | A | 20030514 | CN 2002-152163 | 20021206 <-- |
| PRAI | CN 2002-152163 | | 20021206 <-- | | |

L8 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Composites containing biodegradable polymers and inorganic materials used as tissue engineering scaffold
AB The tissue engineering scaffold with a shape of bar, plate, membrane, and tube consists of structure 1, structure 2, and/or a compact layer. The material for both structures and compact layer is chitosan, chitin, alginate, collagen, glucan, hyaluronic acid, gelatin, agar, hydroxyapatite, Ca3(PO4)2, cay, polyester, polyanhydride, polynitrile, polyorthoformate, and/or polyether. The polyester is poly-L-lactic acid (PLLA), poly-DL-lactic acid (PDLLA), L-lactic acid-DL-lactic acid copolymer, polyglycolic acid, glycolic acid-lactic acid copolymer, caprolactone-lactic acid copolymer, polycaprolactone, caprolactone-glycolic acid-lactic acid copolymer, polycaprolactone-polyether block copolymer, polycaprolactone-polyether-polylactic acid block copolymer, polylactic acid-polyether copolymer, and/or poly(hydroxy acid). The pore size and the porosity of both structures are 5 nm- 600 μm and 30-95%, and the depth of both structures and compact layer is 0.2-10 mm and 0.05-1.0 mm, resp. The process comprises dissolving the material for a structure in solvent (such as dichloromethane, dichloroethane,

chloroform, THF, water, etc) to obtain 1-20% solution, mixing both solution with
5-300 mesh NaCl, pouring in mold, volatilizing solvent for 5- 72 h, vacuum drying for 12-72 h, soaking in water to remove NaCl, drying in air for 5-72 h to obtain structure 1; similarly preparing structure 2; and adhering structure 1 and structure 2 with or without compact layer. The cell scaffold may be used for repair of skin, blood vessel, stifle bone, esophagus, trachea, etc.

AN 2004:253839 HCAPLUS <<LOGINID::20070509>>
DN 141:128889
TI Composites containing biodegradable polymers and inorganic materials used as tissue engineering scaffold
IN Wang, Shenguo; Bei, Jianzhong; Cai, Qing; Shi, Guixin
PA Institute of Chemistry, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 13 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI CN 1386478 | A | 20021225 | CN 2001-118316 | 20010523 <-- |
| PRAI CN 2001-118316 | | 20010523 <-- | | |

L8 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Electrospun amorphous pharmaceutical compositions
AB The present invention is directed to use of electrospinning, i.e. the process of making polymer nanofibers from either a solution or melt under elec. forces, to prepare stable, solid dispersions of amorphous drugs in polymer nanofibers. Thus, carvedilol-HBr monohydrate wa dissolved in THF and water. The solution was added to Polyox WSR1105 in MeCN solution This solution was spun to give nanofibers, and the morphol. of the drug was shown to be amorphous.

AN 2004:142902 HCAPLUS <<LOGINID::20070509>>
DN 140:187404
TI Electrospun amorphous pharmaceutical compositions
IN Ignatious, Francis; Sun, Linghong
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI WO 2004014304 | A2 | 20040219 | WO 2003-US24641 | 20030807 <-- |
| WO 2004014304 | A3 | 20040624 | | |
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| CA 2494865 | A1 | 20040219 | CA 2003-2494865 | 20030807 <-- |
| AU 2003258120 | A1 | 20040225 | AU 2003-258120 | 20030807 <-- |
| EP 1534250 | A2 | 20050601 | EP 2003-784959 | 20030807 <-- |
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| BR 2003013222 | A | 20050614 | BR 2003-13222 | 20030807 <-- |
| CN 1684673 | A | 20051019 | CN 2003-823237 | 20030807 <-- |

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|---|---|---|---|---|---|
| | JP 2005534716 | T | 20051117 | JP 2004-527797 | 20030807 <-- |
| | US 2006013869 | A1 | 20060119 | US 2005-523835 | 20050207 <-- |
| | US 2006083784 | A1 | 20060420 | US 2005-64890 | 20050224 <-- |
| | NO 2005001123 | A | 20050506 | NO 2005-1123 | 20050302 <-- |
| PRAI | US 2002-401726P | P | 20020807 | <-- | |
| | WO 2003-US24641 | W | 20030807 | | |
| | US 2005-523835 | A2 | 20050207 | | |

L8 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions and methods for reducing scar tissue formation
AB The present invention describes the application of sirolimus and analogs of sirolimus to treat wound healing and reduce scar tissue formation. Also contemplated are non-sirolimus compds. believed to interact with the mTOR protein that have similar effects. Specifically, various medium are contemplated to create, for example, microparticles, foams, gels, sprays and bioadhesives that may be administered during surgical procedures involving either open or closed surgical site. Coating medical devices for long-term implantation is contemplated as one method of use of the above compns. PLGA:sirolimus microspheres having an average diameter of 2.5-200 μm were prepared
AN 2004:78468 HCAPLUS <<LOGINID::20070509>>
DN 140:151925
TI Compositions and methods for reducing scar tissue formation
IN Fischell, Robert E.; Fischell, Tim A.; Fischell, Sarah T.; Waldorf, Clayton MacKenzie
PA Afmedica, Inc., USA
SO U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 351,207. CODEN: USXXCO
DT Patent
LA English
FAN.CNT 5

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
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| | US 2002055701 | A1 | 20020509 | US 2001-772693 | 20010131 <-- |
| | US 6534693 | B2 | 20030318 | | |
| | CA 2428082 | A1 | 20020510 | CA 2001-2428082 | 20011016 <-- |
| | AU 200224318 | A | 20020515 | AU 2002-24318 | 20011016 <-- |
| | EP 1385458 | A1 | 20040204 | EP 2001-992543 | 20011016 <-- |
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| | BR 2001015457 | A | 20040615 | BR 2001-15457 | 20011016 <-- |
| | JP 2004529667 | T | 20040930 | JP 2002-538866 | 20011016 <-- |
| | US 2004006296 | A1 | 20040108 | US 2003-351207 | 20030124 <-- |
| | AU 2004247006 | A1 | 20041223 | AU 2004-247006 | 20040506 |
| | CA 2524639 | A1 | 20041223 | CA 2004-2524639 | 20040506 |
| | WO 2004110347 | A2 | 20041223 | WO 2004-US14118 | 20040506 |
| | WO 2004110347 | A3 | 20060202 | | |
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| | EP 1626695 | A2 | 20060222 | EP 2004-751485 | 20040506 |
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| | JP 2007503462 | T | 20070222 | JP 2006-532817 | 20040506 |

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| PRAI | US 2000-705999 | B2 | 20001106 | <-- | |
| | US 2001-772693 | A1 | 20010131 | <-- | |
| | US 2003-351207 | A2 | 20030124 | | |
| | WO 2001-US27771 | W | 20011016 | <-- | |
| | US 2003-431701 | A | 20030507 | | |
| | WO 2004-US14118 | W | 20040506 | | |

L8 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Oral pharmaceutical delivery systems
AB The specification discloses an alginate composition in which drugs or cells may be interspersed with aqueous insol. alginate mols., so that pellets prepared by this procedure would survive the stomach contents, any enzymic activity contained therein, as well as the low pH, and gradually dissolve in the intestinal tract behaving as a controlled release system of any specific drug or cells including, but not limited to, vaccines that are entrapped in the alginate coacervate. Orally administered particles so prepared could be used to eliminate the need for parenteral needle inoculation of various drugs in humans and animals. A 1125-mL of 2.5% sodium alginate solution is prepared A mixture of antibiotics was prepared by adding 230 mL of the zinc salt of bacitracin, having a concentration of 67 IU/mg, to 10 mL water. Neomycin sulfate powder (704 μg neomycin/mg of material) is added to 10 mL of the water at 135 mg. Polymyxin B sulfate containing 8547 units of polymyxin B/mg of powder is added to 10 mL water at 22.6 mg. The 3 sep. solns. are stirred until all of the antibiotics have been dissolved to form a total of 30 mL of solution The mixture of antibiotics so prepared is now added to the alginate solution followed by the addition of 75 mL glycerin, and 6.9 mL polyoxyethylene-polyoxypropylene block polymer. After the addition of 5% calcium chloride solution, small gel pellets are obtained.
AN 2003:874789 HCAPLUS <<LOGINID::20070509>>
DN 139:354476
TI Oral pharmaceutical delivery systems
IN Scherr, George H.
PA USA
SO U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US 2003206957 | A1 | 20031106 | US 2002-138118 | 20020506 <-- |
| PRAI | US 2002-138118 | | 20020506 | <-- | |

L8 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hyaluronic acid modification product
AB Disclosed is a safe hyaluronic acid base material that is suitable for use in practicable hyaluronic acid pharmaceuticals capable of flow at room temperature and having such a low viscosity that injection thereof is easy, the hyaluronic acid pharmaceuticals residing in a joint cavity for a prolonged period of time while exerting a sedative action. More specifically, there is provided a hyaluronic acid modification product comprising hyaluronic acid and/or a pharmaceutically acceptable salt thereof bonded with a block polymer selected from among PEO-PPO-PEO, PPO-PEO-PPO, PEO-PLGA-PEO, PLGA-PEO-PLGA, PEO-PLA-PEO and PLA-PEO-PLA. The hyaluronic acid modification product, despite capable of flow at room temperature and having low viscosity so as to ease handling, can have viscoelastic properties thereof rapidly increased after injection into an organism, so that it is highly useful in treatment of joint diseases, aid in surgical operation, repair of tissue, etc. as a novel practicable main ingredient of

hyaluronic acid pharmaceuticals.
AN 2003:837014 HCAPLUS <<LOGINID::20070509>>
DN 139:323747
TI Hyaluronic acid modification product
IN Shimoboji, Tsuyoshi
PA Chugai Seiyaku Kabushiki Kaisya, Japan
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO 2003087019 | A1 | 20031023 | WO 2003-JP4949 | 20030418 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003235248 | A1 | 20031027 | AU 2003-235248 | 20030418 <-- |
| EP 1496037 | A1 | 20050112 | EP 2003-719136 | 20030418 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| US 2005164980 | A1 | 20050728 | US 2003-511707 | 20030418 <-- |
| PRAI JP 2002-116508 | A | 20020418 <-- | | |
| JP 2002-209429 | A | 20020718 <-- | | |
| JP 2002-331551 | A | 20021115 <-- | | |
| WO 2003-JP4949 | W | 20030418 | | |

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents
AB Disclosed herein are compns. and methods for treating a variety of inflammatory conditions (e.g., inflammatory arthritis, adhesions, tumor excision sites, and fibroproliferative diseases of the eye). For example, there is provided a composition comprising a protein or polysaccharide containing dispersed (e.g., in micelle or liposome form) anti-microtubule agent, which may be formulated for administration to a patient in need thereof. Nanoparticles of paclitaxel contained in a polysaccharide gels were prepared Biocompatibility of paclitaxel in the polysaccharide was tested in guinea pigs.
AN 2003:656227 HCAPLUS <<LOGINID::20070509>>
DN 139:185688
TI Compositions and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents
IN Hunter, William L.; Gravett, David M.; Liggins, Richard T.; Toleikis, Philip M.
PA Angiotech Pharmaceuticals, Inc., Can.
SO U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S. Ser. No. 137,736.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI US 2003157161 | A1 | 20030821 | US 2002-289150 | 20021106 <-- |

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     US 2002192280         A1    20021219    US 2002-137736         20020501 <--
PRAI US 2001-288017P       P     20010501  <--
     US 2002-137736        A2    20020501  <--

L8   ANSWER 14 OF 34  HCAPLUS  COPYRIGHT 2007 ACS on STN
TI   Compositions containing collagen gels and a metalloprotease inhibitor
AB   Compns. comprising collagen and at least one metalloprotease inhibitor,
     and methods of making and using them are provided.  The metalloprotease
     inhibitor can be selected from hydroxamic acids such as trocade or
     batimastat.  Thus, a composition contained batimastat 1 μg-30 mg/mL of
     injectable collagen/saline suspension.
AN   2003:570772  HCAPLUS <<LOGINID::20070509>>
DN   139:122766
TI   Compositions containing collagen gels and a metalloprotease inhibitor
IN   Hunter, William L.; Gravett, David M.; Toleikis, Philip M.; Maiti, Arpita
PA   Angiotech Pharmaceuticals, Inc., Can.
SO   PCT Int. Appl., 62 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.           KIND   DATE       APPLICATION NO.        DATE
     ---------------      ----   --------   --------------------   --------
PI   WO 2003059296         A2    20030724   WO 2002-CA2015         20021230 <--
     WO 2003059296         A3    20030918
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003181371         A1    20030925   US 2002-331125         20021227 <--
     CA 2470430            A1    20030724   CA 2002-2470430        20021230 <--
     AU 2002350361         A1    20030730   AU 2002-350361         20021230 <--
     EP 1458427            A2    20040922   EP 2002-785002         20021230 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     BR 2002015405         A     20050125   BR 2002-15405          20021230 <--
     CN 1610564            A     20050427   CN 2002-826373         20021230 <--
     JP 2005514435         T     20050519   JP 2003-559461         20021230 <--
PRAI US 2001-344568P       P     20011228  <--
     US 2002-331125        A     20021227  <--
     WO 2002-CA2015        W     20021230  <--
OS   MARPAT 139:122766

L8   ANSWER 15 OF 34  HCAPLUS  COPYRIGHT 2007 ACS on STN
TI   Valved prosthesis with porous substrate filled with polymeric hydrogel or
     structural protein
AB   An implantable prosthesis can be formed from an improved biocompatible
     material that provides for cellular colonization of the biocompatible
     material.  Specifically, the biocompatible material is a rigid porous
     material.  In embodiments of particular interest, the implantable
     prosthesis is a mech. heart valve prosthesis with a rigid occluder.  In
     some embodiments, the rigid occluder is formed from the biocompatible
     material.  A filler comprising a hydrogel or a structural protein can be
     located within the pores.  In some embodiments, a bioactive agent is
     within the pores.  In some embodiments, the rigid occluder is formed from
     a polymer material, a carbonaceous solid or a ceramic material.  The pores
     can extend through the rigid material.
AN   2003:346731  HCAPLUS <<LOGINID::20070509>>
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DN 138:343975
TI Valved prosthesis with porous substrate filled with polymeric hydrogel or structural protein
IN Woo, Yi-Ren; Pandit, Abhay
PA St. Jude Medical, Inc., USA
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI EP 1306096 | A2 | 20030502 | EP 2002-257433 | 20021025 <-- |
| EP 1306096 | A3 | 20040407 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRAI US 2001-4504 A 20011026 <--

L8 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Degradable porous materials with high surface areas and their preparation
AB The title method comprises (a) mixing a degradable or partially degradable polymer with a mixed solvent, where the mixed solvent comprises a ratio >1:1 of a first solvent to second solvent, (b) gelling the mixture, (c) and treating the gel under conditions (e.g. freezing) where a substantially solvent-free porous structure is created having a porosity .gtorsim.80%; where the material is mech. strong and has a complex porous structure with nano fibrous architecture. If the solvent is a mixture of e.g. dioxane and pyridine with a ratio of dioxane/pyridine higher than 1:1, certain complex architectures can be generated with pore sizes ≤300 μm and sp. surface areas 10-500 m2/g. The partially degradable polymer may be copolymd. with a non-degradable polymer.
AN 2003:300537 HCAPLUS <<LOGINID::20070509>>
DN 138:322318
TI Degradable porous materials with high surface areas and their preparation
IN Ma, Peter X.
PA The Regents of the University of Michigan, USA
SO U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI US 2003073158 | A1 | 20030417 | US 2002-271489 | 20021016 <-- |
| US 7151120 | B2 | 20061219 | | |
| WO 2003033580 | A2 | 20030424 | WO 2002-US33000 | 20021016 <-- |
| WO 2003033580 | A3 | 20030710 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|---|---|---|---|
| AU 2002335039 | A1 | 20030428 | AU 2002-335039 | 20021016 <-- |
| PRAI US 2001-330205P | P | 20011017 <-- | | |
| US 2001-330335P | P | 20011017 <-- | | |
| WO 2002-US33000 | W | 20021016 <-- | | |

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Bioactive surface modifiers for polymers for medical goods
AB This invention relates to macromol. modifiers containing biol. active drugs/biomols., or precursors thereof, and fluoroligomers; compns. comprising the macromols. containing the drugs and fluoroligomers in admixt. with polymers, particularly biomedical polymers; articles made from the admixts., particularly medical devices. Thus, a polymer was obtained from lysine diisocyanate, polycarbonate diol, a fluoro oligomer and vitamin.
AN 2002:946155 HCAPLUS <<LOGINID::20070509>>
DN 138:29190
TI Bioactive surface modifiers for polymers for medical goods
IN Santerre, Paul J.
PA Can.
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2002098477 | A2 | 20021212 | WO 2002-CA817 | 20020603 <-- |
| | WO 2002098477 | A3 | 20040205 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2349989 | A1 | 20021207 | CA 2001-2349989 | 20010607 <-- |
| | CA 2462529 | A1 | 20021212 | CA 2002-2462529 | 20020603 <-- |
| | AU 2002304926 | A1 | 20021216 | AU 2002-304926 | 20020603 <-- |
| | NZ 529795 | A | 20031219 | NZ 2002-529795 | 20020603 <-- |
| | EP 1418946 | A2 | 20040519 | EP 2002-732278 | 20020603 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | US 2003097120 | A1 | 20030522 | US 2002-162084 | 20020605 <-- |
| | US 6770725 | B2 | 20040803 | | |
| PRAI | CA 2001-2349989 | A | 20010607 <-- | | |
| | WO 2002-CA817 | W | 20020603 <-- | | |

L8 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Compositions comprising protein- or polysaccharide-containing anti-microtubule agents for treatment of inflammatory conditions
AB Disclosed herein are compns. and methods for treating a variety of inflammatory conditions (e.g., inflammatory arthritis, adhesions, tumor excision sites, and fibroproliferative diseases of the eye). There is provided a composition comprising a protein or polysaccharide containing dispersed (e.g., in micelle or liposome form) anti-microtubule agent, which may be formulated for administration to a patient. Paclitaxel dispersed in a micellar carrier was incorporated into a hyaluronic acid hydrogel as follows. Two mL sterile saline was added to a vial that contained 11 mg paclitaxel, 99 mg lactide-methoxy PEG diblock copolymer, and 11 mg phosphate salts. The contents of the vial were dissolved by placing the vial in a water bath at 37° for approx. 30 min with periodic vortexing. A 0.82-mL aliquot of the micellar paclitaxel solution was withdrawn from the vial and was injected into 22.5 mL hyaluronic acid gel. The sample was mixed to produce a homogeneous solution of paclitaxel dispersed in micelles (i.e., micellar paclitaxel) in a hyaluronic acid gel.

AN 2002:849420 HCAPLUS <<LOGINID::20070509>>
DN 137:342138
TI Compositions comprising protein- or polysaccharide-containing anti-microtubule agents for treatment of inflammatory conditions
IN Hunter, William L.; Gravett, David M.; Liggins, Richard T.; Toleikis, Philip M.
PA Angiotech Pharmaceuticals Inc., Can.
SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2002087563 | A2 | 20021107 | WO 2002-CA676 | 20020501 <-- |
| | WO 2002087563 | A3 | 20031030 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2445763 | A1 | 20021107 | CA 2002-2445763 | 20020501 <-- |
| | AU 2002302218 | A1 | 20021111 | AU 2002-302218 | 20020501 <-- |
| | EP 1387676 | A2 | 20040211 | EP 2002-729678 | 20020501 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | JP 2004529934 | T | 20040930 | JP 2002-584909 | 20020501 <-- |
| PRAI | US 2001-288017P | P | 20010501 <-- | | |
| | WO 2002-CA676 | W | 20020501 <-- | | |

L8 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hemostatic compositions of polyacids and polyalkylene oxides
AB The present invention relates to improved methods for making and using hemostatic, bioadhesive, bioresorbable, anti-adhesion compns. made of intermacromol. complexes of carboxyl-containing polysaccharides, polyether, polyacids, polyalkylene oxides, and optionally including multivalent cations and/or polycations and/or hemostatic agents. The polymers can be associated with each other, and are then either dried into membranes or sponges, or are used as fluids, gels, or foams. Hemostatic, bioresorbable, bioadhesive, anti-adhesion compns. are useful in surgery to prevent bleeding and the formation and reformation of post-surgical adhesions. The compns. are designed to breakdown in-vivo, and thus be removed from the body. The hemostatic, anti-adhesion, bioadhesive, bioresorptive, antithrombogenic and/or phys. properties of such compns. can be varied as needed by carefully adjusting the pH, solids content cation content of the polymer casting solns., polyacid composition, the polyalkylene oxide composition, or by adding hemostatic agents. Hemostatic membranes, gels and/or foams can be used concurrently. Hemostatic, antiadhesion compns. may also be used to lubricate tissues and/or medical instruments, and/or deliver drugs to the surgical site and release them locally. CMC/PEO membranes, especially the 50/50 CMC/PEO membrane, is highly anti-thrombogenic, based on the reduction in the number of adherent platelets and the extent of platelet activation on these surfaces. Thus, increasing the amount of PEO in membranes increases their antithrombogenic properties.
AN 2001:816464 HCAPLUS <<LOGINID::20070509>>
DN 135:362573
TI Hemostatic compositions of polyacids and polyalkylene oxides
IN Cortese, Stephanie M.; Schwartz, Herbert E.; Oppelt, William G.

PA Fziomed, Inc., USA
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 7

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2001082937 | A1 | 20011108 | WO 2001-US13520 | 20010426 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2407235 | A1 | 20011108 | CA 2001-2407235 | 20010426 <-- |
| | AU 200155716 | A | 20011112 | AU 2001-55716 | 20010426 <-- |
| | US 2002028181 | A1 | 20020307 | US 2001-843194 | 20010426 <-- |
| | US 6566345 | B2 | 20030520 | | |
| | EP 1292316 | A1 | 20030319 | EP 2001-928913 | 20010426 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | JP 2003531682 | T | 20031028 | JP 2001-579811 | 20010426 <-- |
| | US 2003152522 | A1 | 20030814 | US 2003-371124 | 20030220 <-- |
| PRAI | US 2000-200457P | P | 20000428 <-- | | |
| | US 2000-200637P | P | 20000428 <-- | | |
| | US 2001-843194 | A3 | 20010426 <-- | | |
| | WO 2001-US13520 | W | 20010426 <-- | | |

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polyacid/polyalkylene oxide foams and gels for drug delivery
AB The present invention relates to improved methods for delivering bioadhesive, bioresorbable, anti-adhesion compns. Antiadhesion compns. can be made of intermacromol. complexes of carboxyl-containing polysaccharides, polyethers, polyacids, polyalkylene oxides, multivalent cations and/or polycations. The polymers are associated with each other, and are then used as fluids, gels or foams. By providing a product bag, the compns. can be delivered as gels or as sprays. By dissolving propellant gases in the compns., the materials can be delivered as foams, which have decreased d., and therefore can adhere to surfaces that previously have been difficult to coat with antiadhesion gels. Delivery systems can also provide mechanisms for expelling more product, and for directing the flow of materials leaving the delivery system. Bioresorbable, bioadhesive, anti-adhesion, and/or hemostatic compns. are useful in surgery to prevent the formation and reformation of post-surgical adhesions. The biol. and phys. properties of such compns. can be varied as needed by carefully adjusting the pH and/or cation content of the polymer casting solns., polyacid composition, the polyalkylene oxide composition, or by selecting the solids content of the composition Antiadhesion compns. may also be used to lubricate tissues and/or medical instruments, and/or deliver drugs to the surgical site and release them locally. An antiadhesion composition comprising a gel was loaded into a CCL ABS canister with a liner. The composition comprised 2.2% total solids with a ratio of CMC to PEG of 97.5:2.5, and included sufficient Ca to provide a 60% ionically associated complex. Portions of the composition were sterilized in an autoclave at a temperature of 122° for 35 min.
AN 2001:816395 HCAPLUS <<LOGINID::20070509>>
DN 135:362559

TI  Polyacid/polyalkylene oxide foams and gels for drug delivery
IN  Miller, Mark E.; Cortese, Stephanie M.; Schwartz, Herbert E.; Oppelt, William G.
PA  Fziomed, Inc., USA
SO  PCT Int. Appl., 57 pp.
    CODEN: PIXXD2
DT  Patent
LA  English
FAN.CNT 7

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2001082863 | A2 | 20011108 | WO 2001-US13505 | 20010426 <-- |
| | WO 2001082863 | A3 | 20020221 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
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| | AU 200159177 | A | 20011112 | AU 2001-59177 | 20010426 <-- |
| | US 2002028181 | A1 | 20020307 | US 2001-843194 | 20010426 <-- |
| | US 6566345 | B2 | 20030520 | | |
| | US 2003152522 | A1 | 20030814 | US 2003-371124 | 20030220 <-- |
| PRAI | US 2000-200457P | P | 20000428 <-- | | |
| | US 2000-200637P | P | 20000428 <-- | | |
| | US 2001-843194 | A3 | 20010426 <-- | | |
| | WO 2001-US13505 | W | 20010426 <-- | | |

L8  ANSWER 23 OF 34  HCAPLUS  COPYRIGHT 2007 ACS on STN
TI  Liquid composition of a biodegradable block copolymer for drug delivery system
AB  The present invention relates to a liquid polymeric composition capable of forming a physiol. active substance-containing implant when it is injected into a living body and a method of preparation The composition comprises a water-soluble biocompatible liquid polyethylene glycol derivative, a biodegradable block copolymer which is insol. in water but soluble in the water-soluble biocompatible liquid polyethylene glycol derivative and a physiol. active substance. Thus, a triblock copolymer was prepared from lactide-1,4-dioxanone and PEG. Piroxicam 150, the above biodegradable block copolymer 400, diacetyl polyethylene glycol 420, and gelatin 30 mg were dissolved in a 50% aqueous HOAc solution and the drug-containing liquid polymeric composition was filtered and the organic solvent was removed.
AN  2001:472523  HCAPLUS <<LOGINID::20070509>>
DN  135:66255
TI  Liquid composition of a biodegradable block copolymer for drug delivery system
IN  Seo, Min-hyo; Choi, In-ja
PA  Samyang Corp., S. Korea
SO  PCT Int. Appl., 37 pp.
    CODEN: PIXXD2
DT  Patent
LA  English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | WO 2001045742 | A1 | 20010628 | WO 2000-KR1508 | 20001221 <-- |
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    KR 2001063314        A     20010709    KR 1999-60349          19991222 <--
    CA 2395077           A1    20010628    CA 2000-2395077        20001221 <--
    EP 1244471           A1    20021002    EP 2000-989005         20001221 <--
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            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    JP 2003517886        T     20030603    JP 2001-546681         20001221 <--
    JP 3614820           B2    20050126
    AU 779713            B2    20050210    AU 2001-25550          20001221 <--
    US 2003082234        A1    20030501    US 2002-169012         20020622 <--
    US 6916788           B2    20050712
PRAI KR 1999-60349       A     19991222  <--
    WO 2000-KR1508       W     20001221  <--
RE.CNT  4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8   ANSWER 25 OF 34  HCAPLUS  COPYRIGHT 2007 ACS on STN
TI   Interpenetrating polymer networks as high strength medical sealants
AB   The composition able to form interpenetrating polymer network with superior
     tensile and cohesive strength suitable as medical sealant (such as sutures
     and medical staples) comprises ≥2 multifunctionally activated
     synthetic polymers, along with a tensile strength enhancer.  Thus, the
     copolymer of pentaerythritol tetraacrylate and pentaerythritol
     tetrakis(3-mercaptoproprionate) over Kensey-Nash fibrillar collagen has a
     tensile strength of 140-200 N/cm2.
AN   2001:168054  HCAPLUS <<LOGINID::20070509>>
DN   134:212788
TI   Interpenetrating polymer networks as high strength medical sealants
IN   Wallace, Donald G.
PA   Cohesion Technologies, Inc., USA
SO   PCT Int. Appl., 97 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 6
     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2001016210         A1    20010308    WO 2000-US23657        20000828 <--
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             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
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     AU 200070843         A     20010326    AU 2000-70843          20000828 <--
     EP 1218437           A1    20020703    EP 2000-959535         20000828 <--
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     JP 2003508564        T     20030304    JP 2001-520763         20000828 <--
     JP 2005329264        A     20051202    JP 2005-228917         20050805 <--
PRAI US 1999-151273P      P     19990827  <--
     JP 2001-520763       A3    20000828  <--
     WO 2000-US23657      W     20000828  <--
RE.CNT  4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8   ANSWER 26 OF 34  HCAPLUS  COPYRIGHT 2007 ACS on STN
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TI Analgesic and antinociceptive compositions containing polymers
AB The present invention provides a method of attenuating the response of nociceptors to noxious stimuli by applying a composition comprising a hydrophilic foam substrate, a polymeric hydrophilic agent capable of absorbing water to the surface of the skin. In other aspects, the present invention provides a method of preventing the formation of a bruise in traumatized tissue, a method of attenuating swelling, a method of attenuating neurogenic inflammatory response, and a method of reducing the sensation of pain by applying like compns. to the surface of the skin of patients. A composition comprised a hydrophilic foam substrate, a polymeric hydrophilic agent capable of absorbing water, and a wetting agent to the surface of the skin reduces the sensation of pain and attenuates swelling and bruising. A 65-yr-old male patient underwent arthroscopic surgery to remove a meniscus fragment from his right knee. After the surgery, the knee was dressed with a dressing consisting of Polymem. Following this treatment, the patient required crutches on only one occasion the day of surgery to assist in mobility; the day following the surgery, the patient was able to walk comfortably without orthotics. The patient did not experience significant postoperative pain, and he was not given any pain medication.
AN 1999:795707 HCAPLUS <<LOGINID::20070509>>
DN 132:26876
TI Analgesic and antinociceptive compositions containing polymers
IN Sessions, Robert W.; Kahn, Alan R.
PA Ferris Corporation, USA
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9964081 | A1 | 19991216 | WO 1999-US12738 | 19990607 <-- |
| | W: JP, RU | | | | |
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| | EP 1085913 | A1 | 20010328 | EP 1999-955436 | 19990607 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | US 6451301 | B1 | 20020917 | US 1999-326836 | 19990607 <-- |
| | US 2001009676 | A1 | 20010726 | US 2001-789275 | 20010220 <-- |
| | US 6447802 | B2 | 20020910 | | |
| | US 2002182230 | A1 | 20021205 | US 2002-175109 | 20020619 <-- |
| | US 7078055 | B2 | 20060718 | | |
| | US 2002182173 | A1 | 20021205 | US 2002-175119 | 20020619 <-- |
| | US 7078056 | B2 | 20060718 | | |
| | US 2006210529 | A1 | 20060921 | US 2006-440550 | 20060525 <-- |
| | US 2007059251 | A1 | 20070315 | US 2006-528780 | 20060928 <-- |
| | US 2007025922 | A1 | 20070201 | US 2006-540460 | 20060929 <-- |
| | US 2007025924 | A1 | 20070201 | US 2006-541082 | 20060929 <-- |
| | US 2007025925 | A1 | 20070201 | US 2006-541153 | 20060929 <-- |
| PRAI | US 1998-88424P | P | 19980608 <-- | | |
| | US 1999-326836 | A3 | 19990607 <-- | | |
| | WO 1999-US12738 | W | 19990607 <-- | | |
| | US 2001-789275 | A3 | 20010220 <-- | | |
| | US 2002-175119 | A1 | 20020619 <-- | | |
| | US 2006-440550 | A1 | 20060525 | | |

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polyoxyalkylene compositions and method for inhibiting post-surgical adhesions
AB A method for inhibiting the formation/reformation of post-surgical

internal adhesions comprises administering to tissues of a mammal an aqueous composition containing an effective amount of pentoxifyllin, 60-90% water, and 5-35% polyoxyalkylene-polyoxyethylene block copolymer having average mol. weight ≥5000. The compns. can be adjusted to take advantage of the gelation properties of certain polyoxyalkylene block copolymer solns. which are liquid at room temperature and gel at mammalian body temps. The solns. can be provided as isomotically and pH balanced composition which match the pH and osmotic pressure of mammalian bodily fluids. Thus, an aqueous solution of polyoxyethylene-polyoxypropylene block copolymer 28% and pentoxifyllin 0.40% was prepared which exhibited pH 7.4, osmolality 123 mOsm/kg, and viscosity 360,000 cP at 30°. The solns. exhibited good pentoxifyllin release and significantly reduced post-surgical adhesion formation in rabbit uterines.

AN 1998:484966 HCAPLUS <<LOGINID::20070509>>
DN 129:113557
TI Polyoxyalkylene compositions and method for inhibiting post-surgical adhesions
IN Reeve, Lorraine E.; Flore, Stephen G.
PA MDV Technologies, Inc., USA
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9829147 | A1 | 19980709 | WO 1997-US136 | 19970103 <-- |
| | W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
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| | AU 9715265 | A | 19980731 | AU 1997-15265 | 19970103 <-- |
| | US 6034088 | A | 20000307 | US 1998-141122 | 19980827 <-- |
| | US 6399624 | B1 | 20020604 | US 2000-516640 | 20000301 <-- |
| | US 2003077328 | A1 | 20030424 | US 2002-192903 | 20020710 <-- |
| PRAI | US 1995-540229 | A2 | 19951006 <-- | | |
| | WO 1997-US136 | W | 19970103 <-- | | |
| | US 1998-141122 | A1 | 19980827 <-- | | |
| | US 2000-516640 | A1 | 20000301 <-- | | |

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Biodegradable gel compositions containing crosslinked hyaluronic acid, and sustained-release preparations containing the compositions
AB The title compns. contain water-soluble polyalkylene glycol dispersed in crosslinked hyaluronic acid gels. The title prepns. contain the above compns. and pharmaceuticals selectively supported on the polyalkylene glycol. A gel containing insulin, polyethylene glycol, and crosslinked polymer (prepared by from glycidyl methacrylate-modified hyaluronic acid) was treated with hyaluronidase to release insulin.
AN 1998:155178 HCAPLUS <<LOGINID::20070509>>
DN 128:248616
TI Biodegradable gel compositions containing crosslinked hyaluronic acid, and sustained-release preparations containing the compositions
IN Yui, Nobuhiko
PA Hisamitsu Pharmaceutical Co., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|---|---|---|---|---|---|
| PI | JP 10067687 | A | 19980310 | JP 1996-223932 | 19960826 | <-- |
| | JP 3898783 | B2 | 20070328 | | | |
| PRAI | JP 1996-223932 | | 19960826 | <-- | | |

L8 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Drug release systems containing water-soluble polymer domain and biodegradable hydrogel as matrix
AB Stimulation-responsive drug release systems comprise water-soluble polymer domain (e.g. polyethylene glycol) and biodegradable hydrogel (e.g. dextran) as matrix. Active ingredients such as insulin showed selective distribution in the polyethylene glycol -dextran diphase. Active ingredients (e.g. insulin) as well as the polymer domain are released in response to biodegrdn. of biodegradable hydrogel from the surface.
AN 1996:676099 HCAPLUS <<LOGINID::20070509>>
DN 125:309046
TI Drug release systems containing water-soluble polymer domain and biodegradable hydrogel as matrix
IN Yui, Nobuhiko
PA Shingijutsu Kaihatsu Jigyodan, Japan; Japan Science and Technology Agency
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
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| PI | JP 08231435 | A | 19960910 | JP 1995-38427 | 19950227 | <-- |
| | JP 3536186 | B2 | 20040607 | | | |
| PRAI | JP 1995-38427 | | 19950227 | <-- | | |

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| NEWS | 2 | JAN 08 | CHEMLIST enhanced with New Zealand Inventory of Chemicals |
| NEWS | 3 | JAN 16 | CA/CAplus Company Name Thesaurus enhanced and reloaded |
| NEWS | 4 | JAN 16 | IPC version 2007.01 thesaurus available on STN |
| NEWS | 5 | JAN 16 | WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data |
| NEWS | 6 | JAN 22 | CA/CAplus updated with revised CAS roles |
| NEWS | 7 | JAN 22 | CA/CAplus enhanced with patent applications from India |
| NEWS | 8 | JAN 29 | PHAR reloaded with new search and display fields |
| NEWS | 9 | JAN 29 | CAS Registry Number crossover limit increased to 300,000 in multiple databases |
| NEWS | 10 | FEB 15 | PATDPASPC enhanced with Drug Approval numbers |
| NEWS | 11 | FEB 15 | RUSSIAPAT enhanced with pre-1994 records |
| NEWS | 12 | FEB 23 | KOREAPAT enhanced with IPC 8 features and functionality |
| NEWS | 13 | FEB 26 | MEDLINE reloaded with enhancements |
| NEWS | 14 | FEB 26 | EMBASE enhanced with Clinical Trial Number field |
| NEWS | 15 | FEB 26 | TOXCENTER enhanced with reloaded MEDLINE |
| NEWS | 16 | FEB 26 | IFICDB/IFIPAT/IFIUDB reloaded with enhancements |
| NEWS | 17 | FEB 26 | CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases |
| NEWS | 18 | MAR 15 | WPIDS/WPIX enhanced with new FRAGHITSTR display format |
| NEWS | 19 | MAR 16 | CASREACT coverage extended |
| NEWS | 20 | MAR 20 | MARPAT now updated daily |
| NEWS | 21 | MAR 22 | LWPI reloaded |
| NEWS | 22 | MAR 30 | RDISCLOSURE reloaded with enhancements |
| NEWS | 23 | APR 02 | JICST-EPLUS removed from database clusters and STN |
| NEWS | 24 | APR 30 | GENBANK reloaded and enhanced with Genome Project ID field |
| NEWS | 25 | APR 30 | CHEMCATS enhanced with 1.2 million new records |
| NEWS | 26 | APR 30 | CA/CAplus enhanced with 1870-1889 U.S. patent records |
| NEWS | 27 | APR 30 | INPADOC replaced by INPADOCDB on STN |
| NEWS | 28 | MAY 01 | New CAS web site launched |
| NEWS | 29 | MAY 08 | CA/CAplus Indian patent publication number format defined |

| | |
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| NEWS EXPRESS | NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006. |
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E9            1     PLURONIC 10R5/CN
E10           1     PLURONIC 10R8/CN
E11           1     PLURONIC 121/CN
E12           1     PLURONIC 122/CN

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=> d l1

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2007 ACS on STN
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CN   Oxirane, 2-methyl-, polymer with oxirane, triblock  (CA INDEX NAME)
OTHER NAMES:
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CN   Acclaim 4220N
CN   Acclaim Polyol PPO 2220N
CN   Acclaim Polyol PPO 4220N
CN   Adeka Pluronic F 68
CN   Adeka Pluronic L 64
CN   Adekanol L 61
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CN Adekanol L 64
CN Antarox 17R4
CN Antarox 31R1
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CN Blaunon P 106
CN Blaunon P 304
CN Chemax BP 261
CN Chemex BP 261
CN CRL 1005
CN Epan 410
CN Epan P 45
CN Ethox L 122
CN Ethylene oxide-propylene oxide triblock copolymer
CN F 108
CN F 127
CN F 68
CN F 88
CN L 121
CN L 123
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CN Lutrol L 92
CN Meroxapol 108
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CN Meroxapol 252
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CN Methyloxirane-oxirane triblock copolymer
CN Newpol PE 61
CN Nissan Plonon 104
CN Nissan Plonon 204
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CN Nissan Plonon 407
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CN Novanik 600/50
CN Pluronic
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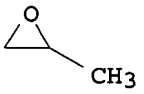

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

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118 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3062 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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| FULL ESTIMATED COST | 7.35 | 7.56 |

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| | ENTRY | SESSION |
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FILE COVERS 1907 - 9 May 2007 VOL 146 ISS 20
FILE LAST UPDATED: 1 May 2007 (20070501/ED)

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=> s hyaluron?

L3 27348 HYALURON?

=> s L2 and L3

3062 L1
L4 63 L2 AND L3

=> file stnguide

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 2.60 | 10.69 |

FILE 'STNGUIDE' ENTERED AT 16:02:23 ON 09 MAY 2007
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=> file hcaplus

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 0.06 | 10.75 |

FILE 'HCAPLUS' ENTERED AT 16:03:04 ON 09 MAY 2007
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FILE COVERS 1907 - 9 May 2007 VOL 146 ISS 20
FILE LAST UPDATED: 1 May 2007 (20070501/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

=> s inject?

L5 768807 INJECT?

=> s L4 and L5

L6 11 L4 AND L5

=> file stnguide

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 2.60 | 13.35 |

FILE 'STNGUIDE' ENTERED AT 16:03:07 ON 09 MAY 2007
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May 4, 2007 (20070504/UP).

=> d l6 1-11 ti
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L6 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Formulations and methods for delivery of growth factor analogs

L6 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Emulsion composition comprising polymer and hyaluronate

L6 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI In situ controlled release drug delivery system

L6 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Composite gels containing calcium phosphate and bioactive components for tissue engineering

L6 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Advances in injectable hydrogels for tissue engineering

L6 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Taurolidine formulations for antimicrobial protection against bacterial biofilm formation

L6 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Evaluation of different scaffolds for BMP-2 genetic orthopedic tissue engineering

L6 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Therapeutic ophthalmic compositions containing retinal friendly excipients

such as cyclodextrins and related methods

L6 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polymer-drug conjugates for the treatment of adhesions and fibrotic disorders

L6 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Methods and compositions to treat myocardial conditions

L6 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hyaluronic acid modification product

=> d l6 1-11 ti as bib
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

'AS' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

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ABS --------- GI and AB
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CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY, e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT) containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its

structure diagram, plus NTE and SEQ fields
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OCC --------- Number of occurrence of hit term and field in which it occurs

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ENTER DISPLAY FORMAT (BIB):ti abs bib

L6 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Formulations and methods for delivery of growth factor analogs
AB The present invention relates to formulations, kits and methods for bone or cartilage repair, including treatment of osteogenic defects, including formulations of synthetic heparin-binding growth factor analogs, non-ionic polymers, gelling agents and calcium-containing agents. For example, injectable gel was prepared containing Pluronic F-127 100 g, CM-cellulose 2 g, calcium sulfate dihydrate 10.5 g and human demineralized bone matrix 250 mg.
AN 2006:952379 HCAPLUS
DN 145:342442
TI Formulations and methods for delivery of growth factor analogs
IN Zamora, Paul O.; Campion, Sarah
PA Biosurface Engineering Technologies, Inc., USA
SO U.S. Pat. Appl. Publ., 43pp., Cont.-in-part of U.S. Ser. No. 167,636.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 5

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US 2006205652 | A1 | 20060914 | US 2006-361090 | 20060223 |
| | US 2006024347 | A1 | 20060202 | US 2005-167636 | 20050627 |
| | WO 2006093808 | A1 | 20060908 | WO 2006-US6472 | 20060224 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

| | | | |
|---|---|---|---|
| PRAI | US 2004-543616P | P | 20040210 |
| | US 2005-55428 | A2 | 20050210 |
| | US 2005-655570P | P | 20050222 |
| | US 2005-656174P | P | 20050225 |
| | US 2005-656713P | P | 20050225 |
| | US 2005-656714P | P | 20050225 |
| | US 2005-167636 | A2 | 20050627 |
| | US 2004-583566P | P | 20040628 |
| | US 2006-361090 | A | 20060223 |

L6 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Emulsion composition comprising polymer and hyaluronate
AB The present invention relates to methods and depot emulsion compns. for

delivery of vis co-supplements. For example, injectable emulsion was prepared containing poly(caprolactone-glycolic acid-L-lactic acid) 40% dissolved in benzyl benzoate 60%.

AN 2006:635389 HCAPLUS
DN 145:90047
TI Emulsion composition comprising polymer and hyaluronate
IN Chen, Guohua; Chan, Edwin; Rosenblatt, Joel
PA USA
SO U.S. Pat. Appl. Publ., 6 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US 2006140988 | A1 | 20060629 | US 2005-305939 | 20051219 |
| | WO 2006071694 | A1 | 20060706 | WO 2005-US46446 | 20051220 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

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|---|---|---|---|
| PRAI | US 2004-638535P | P | 20041223 |
| | US 2005-305939 | A | 20051219 |

L6 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI In situ controlled release drug delivery system
AB A system is described for long-term controlled release delivery of a drug or a therapeutic agent. One or more drugs or therapeutic agents contained in microspheres are mixed with a temperature sensitive hydrogel which is then introduced directly to the desired situs of the drug or therapeutic agent. The temperature sensitive hydrogel may also contain a drug or a therapeutic agent, for example, a pain relieving drug, for a short-term controlled release. The temperature sensitive hydrogel is in liquid state at room temperature, but upon injection, shortly becomes gelatinous. This system is particularly suitable for treatment of diseases, disorders, or conditions, for example, tumors, discogenic back pain, or arthritis, warranting localized administration of a drug or a therapeutic agent. In addition, the specification provides a method for production of a drug- or therapeutic agent-containing microspheres. Polycaprolactone microspheres were prepared by solvent evaporation and hot melt encapsulation. Drug carriers were then prepared from the microspheres, Poloxamers, and Na hyaluronate for treatment of an intervertebral disk.
AN 2006:410016 HCAPLUS
DN 144:440100
TI In situ controlled release drug delivery system
IN Lim, Tae-Hong; Park, Joon B.; Lee, Jin Whan
PA University of Iowa Research Foundation, USA
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2006047279 | A2 | 20060504 | WO 2005-US37872 | 20051021 |

WO 2006047279 A3 20060810
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
US 2006188583 A1 20060824 US 2005-256416 20051021
PRAI US 2004-620929P P 20041021

L6 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Composite gels containing calcium phosphate and bioactive components for tissue engineering
AB The invention relates to a composite material of porous material and gel, its preparation method, and its use in bone and cartilage tissue engineering, specifically an artificial bone with porous structure made from hydroxyapatite and collagen. The composite material is made from porous material and collagen gel, wherein the porous material is one or more of α-tricalcium phosphate/hydroxyapatite dual-phase calcined bone and coral, β-tricalcium phosphate/hydroxyapatite dual-phase calcined bone and coral, calcium phosphate/hydroxyapatite dual-phase coral, calcium carbonate/hydroxyapatite dual-phase coral, calcium carbonate/calcium phosphate dual-phase coral, calcium phosphate-coral, hydroxyapatite-coral, α-tricalcium phosphate or β-tricalcium phosphate calcined bone and coral, natural coral, xenogenic or heterogeneous cancellous bone, synthetic porous ceramic, and porous hydroxyapatite/collagen composite. The gel is injectable gel. The composite material is widely used as stent for bone tissue engineering and used as carrier for sustained-release of cells and drugs.
AN 2006:142638 HCAPLUS
DN 144:318656
TI Composite gels containing calcium phosphate and bioactive components for tissue engineering
IN Xu, Xiaoliang; Liu, Aihong
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 51 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI CN 1644221 | A | 20050727 | CN 2005-10023630 | 20050126 |
| PRAI CN 2005-10023630 | | 20050126 | | |

L6 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Advances in injectable hydrogels for tissue engineering
AB A review on gelation processes of injectable polymeric hydrogels and in-situ gel formation under physiol. conditions. Applications of injectable hydrogels in tissue engineering, such as hyaluronic acid, alginate, chitosan, poly(isopropylacrylamide) and PEO or PEO-PPO-PEO hydrogels, were emphasized.
AN 2005:1329832 HCAPLUS
DN 145:357287
TI Advances in injectable hydrogels for tissue engineering
AU Chen, Tao; Yao, Kangde
CS Research Institute of Polymeric Materials, Tianjin University, Tianjin, 300072, Peop. Rep. China
SO Huagong Jinzhan (2004), 23(8), 827-831

CODEN: HUJIEK; ISSN: 1000-6613
PB Huaxue Gongye Chubanshe
DT Journal; General Review
LA Chinese

L6 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Taurolidine formulations for antimicrobial protection against bacterial biofilm formation
AB Localized bacterial infection can be treated by locally applying e.g., taurolidine gels, suspensions or thixotropic gels to the infection. A device for insertion into the body comprises taurolidine to render the device infection resistant. A method for treating blood, comprises removing blood from the body, treating the blood with taurolidine, and returning the treated blood.
AN 2005:1290207 HCAPLUS
DN 144:27596
TI Taurolidine formulations for antimicrobial protection against bacterial biofilm formation
IN Polaschegg, Hans-Dietrich
PA Austria
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO 2005115357 | A2 | 20051208 | WO 2005-EP5438 | 20050516 |
| WO 2005115357 | A3 | 20060511 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2004-571272P P 20040514

L6 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Evaluation of different scaffolds for BMP-2 genetic orthopedic tissue engineering
AB To better understand the effects of scaffold materials for bone morphogenetic protein 2 (BMP-2) genetic tissue engineering in vivo, several gels, including alginate, collagen, agarose, hyaluronate , fibrin, or Pluronic, were mixed with adenovirus-mediated human BMP-2 gene (Adv-hBMP-2) transduced bone marrow stromal cells (BMSCs) and injected into the muscles of athymic mice to evaluate the resulting osteogenesis and chondrogenesis. These gel and gene-transduced BMSC mixts. were also loaded onto β-TCP/HAP biphasic calcined bone (BCB) and observed under SEM. In addition, these composite scaffolds were implanted into the s.c. site of athymic mice to construct tissue-engineered bone. After injection, collagen, hyaluronate, or alginate gel mixed with gene-transduced BMSCs induced more bone formation than a cell suspension in α-MEM. The agarose-gene-transduced BMSC gel was found to contain much more hyaline cartilage. SEM showed the BMSCs could survive in alginate, agarose, and collagen gel in vitro for up to 8 d. After implantation of tissue-engineered bone, the alginate, collagen, and agarose gel could promote new bone formation within a BCB in vivo. Little or no bone formed after injection of fibrin or Pluronic gel mixed with BMSCs or

implantation with BCB. These findings help to elucidate the effects of various scaffold materials for future research in orthopedic tissue engineering using BMP-2 transduced cells.

AN 2005:1243743 HCAPLUS
DN 144:135065
TI Evaluation of different scaffolds for BMP-2 genetic orthopedic tissue engineering
AU Xu, X. Leon; Lou, Jueren; Tang, Tingting; Ng, Kenneth Wayman; Zhang, Junhui; Yu, Chaofeng; Dai, Kerong
CS Department of Orthopedic Surgery, Ninth People's Hospital, Shanghai Second Medical University, Shanghai, 200011, Peop. Rep. China
SO Journal of Biomedical Materials Research, Part B: Applied Biomaterials (2005), 75B(2), 289-303
CODEN: JBMRGL; ISSN: 1552-4973
PB John Wiley & Sons, Inc.
DT Journal
LA English
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Therapeutic ophthalmic compositions containing retinal friendly excipients such as cyclodextrins and related methods
AB Pharmaceutical compns. suitable for administration into the interior of an eye of a person or animal are described. The present compns. include one or more components which are effective in providing a reduced toxicity relative to existing intraocular ophthalmic compns. The present compns. include one or more therapeutic agents in amts. effective in providing a desired therapeutic effect when placed in an eye, and one or more retinal friendly excipients that have a reduced toxicity relative to benzyl alc. or Polysorbate 80. In certain compns., the excipient component of the compns. comprises one or more cyclodextrins or cyclodextrin derivs. Methods of using the compns. to treat ocular conditions are also described. Thus, eight groups of rabbits (3/group) were given a single intravitreal injection (0.1 mL) of one of the following compns. into the left eye of a rabbit: (1) Kenalog-40 (4% triamcinolone acetonide (TA); 4 mg TA/0.1 mL); (2) 2% hyaluronic acid (HA) + 4% TA; (3) 0.5% sulfobutyl ether β-cyclodextrin + 4% TA; (4) 55% sulfobutyl ether β-cyclodextrin + 4% TA; (5) 0.5% γ-cyclodextrin + 4% TA; (6) 5% γ-cyclodextrin + 4% TA; (7) 0.5% vitamin E-TPGS + 4% TA; and (8) 2% vitamin E-TPGS + 4% TA. The right eye of the rabbit received a similar volume of 0.9% NaCl. No significant changes in the ERG b-wave were observed in eyes given compns. (1) and (2), while reaction to other compns. was detected, such as subacute vitreitis, chronic chorioretinitis, degenerative and necrotic lesions of the optic nerve head and retina characterized by edema, axonal eosinophilia, etc.
AN 2005:1201034 HCAPLUS
DN 143:466181
TI Therapeutic ophthalmic compositions containing retinal friendly excipients such as cyclodextrins and related methods
IN Hughes, Patrick M.; Delahaye, Laurent; Boix, Michele; Chang, James N.; Lyons, Robert T.
PA Allergan, Inc., USA
SO U.S. Pat. Appl. Publ., 54 pp., Cont.-in-part of U.S. Ser. 966,764.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US 2005250737 | A1 | 20051110 | US 2005-91977 | 20050328 |
| | US 2005101582 | A1 | 20050512 | US 2004-966764 | 20041014 |
| PRAI | US 2003-519232P | P | 20031112 | | |
| | US 2003-530062P | P | 20031216 | | |
| | US 2004-966764 | A2 | 20041014 | | |

US 2003-519237P P 20031112

L6 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Polymer-drug conjugates for the treatment of adhesions and fibrotic disorders
AB The invention discloses agents and methods for treatment of adhesions and fibrotic diseases, through the release of drugs that retard or inhibit fibrotic tissue production A method for releasing fibrotic tissue-inhibiting agents from a polymer is provided. The polymer/drug combination can be applied directly to affected site as a liquid, gel, or paste. Alternatively, the polymer/drug combination can be injected ( i.v., i.p., or s.c.) in an appropriate vehicle. Preparation and testing of poly(PEG-Lys-cHyp) is described.
AN 2004:878276 HCAPLUS
DN 141:360720
TI Polymer-drug conjugates for the treatment of adhesions and fibrotic disorders
IN Pachence, James M.; Belinka, Benjamin A.; Putnam, Charles L.
PA Vectramed, Inc., USA
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2004089311 | A2 | 20041021 | WO 2004-US9919 | 20040330 |
| | WO 2004089311 | A3 | 20041216 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2521407 | A1 | 20041021 | CA 2004-2521407 | 20040330 |
| | EP 1608380 | A2 | 20051228 | EP 2004-758674 | 20040330 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| | JP 2006522140 | T | 20060928 | JP 2006-509537 | 20040330 |
| PRAI | US 2003-458449P | P | 20030331 | | |
| | US 2004-790136 | A | 20040302 | | |
| | WO 2004-US9919 | W | 20040330 | | |

L6 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Methods and compositions to treat myocardial conditions
AB Methods, devices, kits and compns. to treat a myocardial infarction. In one embodiment, the method includes the prevention of remodeling of the infarct zone of the ventricle. In other embodiments, the method includes the introduction of structurally reinforcing agents. In other embodiments, agents are introduced into a ventricle to increase compliance of the ventricle. In an alternative embodiment, the prevention of remodeling includes the prevention of thinning of the ventricular infarct zone. In another embodiment, the prevention of remodeling and thinning of the infarct zone involves the crosslinking of collagen and prevention of collagen slipping. In other embodiments, the structurally reinforcing agent may be accompanied by other therapeutic agents. These agents may include but are not limited to pro-fibroblastic and angiogenic agents.
AN 2004:877926 HCAPLUS
DN 141:360681
TI Methods and compositions to treat myocardial conditions

IN Michal, Eugene T.; Mandrusov, Evgenia; Claude, Charles D.; Ding, Ni; Simhambhatla, Murthy; Ahmed, Hossainy Syed Faiyez; Sridharan, Srinivasan; Consigny, Paul
PA USA
SO U.S. Pat. Appl. Publ., 63 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | US 2004208845 | A1 | 20041021 | US 2003-414602 | 20030415 |
| | WO 2004091592 | A2 | 20041028 | WO 2004-US11356 | 20040413 |
| | WO 2004091592 | A3 | 20050217 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | EP 1631299 | A2 | 20060308 | EP 2004-750070 | 20040413 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| | JP 2006523507 | T | 20061019 | JP 2006-509975 | 20040413 |
| PRAI | US 2003-414602 | A | 20030415 | | |
| | US 2003-414767 | A | 20030415 | | |
| | WO 2004-US11356 | W | 20040413 | | |

L6 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hyaluronic acid modification product
AB Disclosed is a safe hyaluronic acid base material that is suitable for use in practicable hyaluronic acid pharmaceuticals capable of flow at room temperature and having such a low viscosity that injection thereof is easy, the hyaluronic acid pharmaceuticals residing in a joint cavity for a prolonged period of time while exerting a sedative action. More specifically, there is provided a hyaluronic acid modification product comprising hyaluronic acid and/or a pharmaceutically acceptable salt thereof bonded with a block polymer selected from among PEO-PPO-PEO, PPO-PEO-PPO, PEO-PLGA-PEO, PLGA-PEO-PLGA, PEO-PLA-PEO and PLA-PEO-PLA. The hyaluronic acid modification product, despite capable of flow at room temperature and having low viscosity so as to ease handling, can have viscoelastic properties thereof rapidly increased after injection into an organism, so that it is highly useful in treatment of joint diseases, aid in surgical operation, repair of tissue, etc. as a novel practicable main ingredient of hyaluronic acid pharmaceuticals.
AN 2003:837014 HCAPLUS
DN 139:323747
TI Hyaluronic acid modification product
IN Shimoboji, Tsuyoshi
PA Chugai Seiyaku Kabushiki Kaisya, Japan
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | WO 2003087019 | A1 | 20031023 | WO 2003-JP4949 | 20030418 |

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            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003235248        A1    20031027    AU 2003-235248          20030418
    EP 1496037           A1    20050112    EP 2003-719136          20030418
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            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    US 2005164980        A1    20050728    US 2003-511707          20030418
PRAI JP 2002-116508      A     20020418
    JP 2002-209429       A     20020718
    JP 2002-331551       A     20021115
    WO 2003-JP4949       W     20030418
RE.CNT  5     THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


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FULL ESTIMATED COST                                      0.12      53.66

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=> s L4 and (AY<2003 or PY<2003 or PRY<2003

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CA SUBSCRIBER PRICE                                   0.00      -8.58

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FILE LAST UPDATED: 1 May 2007  (20070501/ED)

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CA SUBSCRIBER PRICE                                   0.00      -8.58

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LAST RELOADED: May 4, 2007 (20070504/UP).

=> d l7 1-6 ti
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L7 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Biocompatible coatings for stents

L7 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Agents and methods for enhancement of transdermal transport

L7 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Lubricating oil concentrates with sanitizing, cleaning, and antimicrobial properties, especially for beverage processing conveyors

L7 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
TI A method for controlling gelation kinetics of vinyl polymer hydrogels useful for repairing intervertebral disks or articulated joints

L7 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Peptides capable of facilitating penetration across a biological barrier and their use in drug delivery

L7 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
TI Hyaluronic acid modification product

=> s l7 not l6
'2003' NOT A VALID FIELD CODE
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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L9            5 L7 NOT L6

=> d l9 1-5 ti abs bib
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L9 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI Biocompatible coatings for stents
AB A coating for a medical device, particularly for a stent, is described. The coating comprises a polymer and a biol. responsive compound The coating can also contain a drug to provide enhanced therapeutic effect.
AN 2006:340724 CAPLUS
DN 144:357811
TI Biocompatible coatings for stents
IN Hossainy, Syed F. A.
PA Advanced Cardiovascular Systems, Inc., USA
SO U.S. Pat. Appl. Publ., 5 pp., Cont. of U.S. Ser. No. 260,182, now abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US 2006078588 | A1 | 20060413 | US 2005-288754 | 20051128 <-- |
| PRAI | US 2002-260182 | B1 | 20020927 <-- | | |

L9 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI Agents and methods for enhancement of transdermal transport
AB The invention according to an exemplary embodiment relates to a method for transporting a substance across a biol. membrane comprising the steps of (i) applying a delipidation agent to a portion of the biol. membrane, (ii) applying a hydration agent to the portion of the biol. membrane, (iii) sonicating the portion of the biol. membrane, and (iv) transporting the substance across the biol. membrane. The step of applying the delipidation agent may be carried out prior to or simultaneously with the step of applying the hydration agent. The hydration agent may be applied before, during, or after the sonication step. The methods according to exemplary embodiments of the invention can provide improved transdermal transport in applications such as continuous analyte extraction and anal. and transdermal delivery of drugs and vaccines. Thus, sonication was achieved in a successful and reproducible manner when skin of human volunteers was pretreated with an alc. wipe (70% isopropanol) for solvation and stripping of skin surface lipids, followed by hydration of the epidermal corneocytes

using a glycerol wipe (5% glycerol).

AN 2006:56990 CAPLUS

DN 144:135453

TI Agents and methods for enhancement of transdermal transport

IN Kellogg, Scott C.; Barman, Shikha; Roode, Lauren; Farnham, Hannah; Moran, Sean; Mitragotri, Samir S.; Kost, Joseph; Warner, Nicholas F.

PA USA

SO U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 974,963.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | US 2006015058 | A1 | 20060119 | US 2005-65278 | 20050225 <-- |
| | CA 2317777 | A1 | 19990715 | CA 1999-2317777 | 19990108 <-- |
| | CA 2317777 | C | 20050503 | | |
| | EP 1045714 | A1 | 20001025 | EP 1999-901378 | 19990108 <-- |
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| | AU 740999 | B2 | 20011122 | AU 1999-21091 | 19990108 <-- |
| | JP 2002500075 | T | 20020108 | JP 2000-527303 | 19990108 <-- |
| | WO 2000035357 | A1 | 20000622 | WO 1999-US30065 | 19991217 <-- |
| | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
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| | JP 2002532130 | T | 20021002 | JP 2000-587679 | 19991217 <-- |
| | WO 2001070330 | A2 | 20010927 | WO 2001-US8489 | 20010316 <-- |
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| | US 2003100846 | A1 | 20030529 | US 2002-979096 | 20020311 <-- |
| | US 7066884 | B2 | 20060627 | | |
| | WO 2006091877 | A2 | 20060831 | WO 2006-US6712 | 20060227 |
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| PRAI | US 1998-70813P | P | 19980108 <-- | | |
| | US 1998-112953P | P | 19981218 <-- | | |
| | US 1999-227623 | A2 | 19990108 <-- | | |
| | US 1999-142941P | P | 19990712 <-- | | |
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| | US 1999-142975P | P | 19990712 <-- | | |

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| WO 2001-US8489 | W | 20010316 | <-- |
| US 2001-868442 | A2 | 20010724 | <-- |
| US 2002-979096 | A2 | 20020311 | <-- |
| US 2004-974963 | A2 | 20041028 | |
| WO 1999-US437 | W | 19990108 | <-- |
| US 2000-189971P | P | 20000317 | <-- |
| US 2005-65278 | A | 20050225 | |

L9 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI Lubricating oil concentrates with sanitizing, cleaning, and antimicrobial properties, especially for beverage processing conveyors
AB Concs. for food-grade lubricating oils with sanitizing, antimicrobial, and cleaning properties, especially for lubrication of beverage conveyors, consist of benzoic acid (in addition to other acids, such as phosphoric acid and lactic acid) and ≥1 anionic surfactant, in which the ingredients are generally regarded as safe (GRAS, by U.S. FDA stds.) for use in food processing. The lubricating oils have a pH ≤5.0. Addnl. acidifying agents include acetic acid, adipic acid, ascorbic acid, citric acid, dehydroacetic acid, erythorbic acid, fumaric acid, etc. Anionic surfactants include sodium dodecylbenzenesulfonate, sodium α-olefinsulfonate, sodium diocylsulfosuccinate, and sodium decyllactate. The composition can also include a sequestering agent, such as citric acid, EDTA, Na dihydrogen phosphate, calcium citrate, monobasic calcium phosphate, iso-Pr citrate, etc.
AN 2005:431378 CAPLUS
DN 142:449245
TI Lubricating oil concentrates with sanitizing, cleaning, and antimicrobial properties, especially for beverage processing conveyors
IN Lopes, John A.
PA USA
SO U.S. Pat. Appl. Publ., 6 pp., Cont.-in-part of U.S. Ser. No. 657,902, abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
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| | US 2004048755 | A1 | 20040311 | US 2003-657902 | 20030909 | <-- |
| | US 6953772 | B2 | 20051011 | | | |
| PRAI | US 2003-657902 | B2 | 20030909 | | | |
| | US 2000-219256P | P | 20000718 | <-- | | |
| | US 2001-908527 | A2 | 20010718 | <-- | | |

L9 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI A method for controlling gelation kinetics of vinyl polymer hydrogels useful for repairing intervertebral disks or articulated joints
AB The method controllably makes a vinyl polymer hydrogel having desired phys. properties without chemical crosslinks or radiation, includes the steps of: (1) providing a vinyl polymer solution comprising a vinyl polymer dissolved in a first solvent; (2) heating the vinyl polymer solution to a temperature elevated above the m.p. of the phys. assocns. of the vinyl polymer, (3) mixing the vinyl polymer solution with a gellant, wherein the resulting mixture has a higher Flory interaction parameter than the vinyl polymer solution; (4) inducing gelation of the mixture of vinyl polymer solution and gellant; and (5) controlling the gelation rate to form a viscoelastic solution, wherein workability is maintained for a predetd. period, thereby making a vinyl polymer hydrogel having the desired phys. property. A typical example of vinyl polymers used is poly(vinyl alc.) and the gellant is selected from salts, alcs., polyols, amino acids, sugars, proteins, polysaccharides or/and mixture thereof.
AN 2004:722934 CAPLUS
DN 141:226404

TI A method for controlling gelation kinetics of vinyl polymer hydrogels useful for repairing intervertebral disks or articulated joints
IN Ruberti, Jeffrey W.; Braithwaite, Gavin J. C.
PA Cambridge Polymer Group, Inc., USA
SO U.S. Pat. Appl. Publ., 58 pp., Cont.-in-part of U.S. Ser. No. 631,491.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
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| | WO 2005080477 | A2 | 20050901 | WO 2005-US4773 | 20050204 | |
| | WO 2005080477 | A3 | 20051110 | | | |
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L9 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI Peptides capable of facilitating penetration across a biological barrier and their use in drug delivery
AB The invention relates to amino acid sequences capable of facilitating penetration of an effector across a biol. barrier such as epithelial and endothelial cell layers. The invention also relates to methods of treating or preventing diseases by administering penetrating modules to affected subjects. Thus, a conserved peptide sequence from an Haemophilus influenzae protein involved in paracytosis facilitates penetration of this bacterium between human lung epithelial cells without compromising the epithelial barrier. This peptide, and similar peptides from other bacteria or from human NK-1 and NK-2 receptors, are disclosed. One such peptide, derived from E. coli YCFC protein, when fused to insulin, facilitated its passage across the mouse intestine and caused lowering of blood glucose levels.
AN 2004:609742 CAPLUS
DN 141:162351
TI Peptides capable of facilitating penetration across a biological barrier and their use in drug delivery
IN Ben-Sasson, Shmuel A.; Cohen, Einat
PA Chiasma, Inc., USA
SO U.S. Pat. Appl. Publ., 54 pp., Cont.-in-part of Appl. No. PCT/03IB/00968.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 4

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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